

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|---|-------------------|----------------------|-------------------------|-------------------------|--|--|
| 10/563,015 | 12/28/2005 | Alfredo Poloni | NOTAR -028US | 3951 | | |
| 7663 7: | 590 12/08/2006 | | EXAMI | EXAMINER | | |
| | RUNDA GARRED & BI | TRAN, LEN | | | | |
| 75 ENTERPRISE, SUITE 250 ALISO VIEJO, CA 92656 | | | ART UNIT | PAPER NUMBER | | |
| | , | , | • 1725 | | | |
| | | • | DATE MAILED: 12/08/2006 | DATE MAILED: 12/08/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | | \mathcal{N} | | | |
|--|---|---|---|--|---------------|--|--|--|
| | | Application No. | | Applicant(s) | | | | |
| | | 10/563,015 | | POLONI ET AL. | | | | |
| | Office Action Summary | Examiner | | Art Unit | | | | |
| | | Len Tran | | 1725 | <u> </u> | | | |
| Period f | The MAILING DATE of this communication app or Reply | pears on the cover | sheet with the co | rrespondence addre | SS | | | |
| A SH WHIO - Exte after - If NO - Faili Any | HORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Downsions of time may be available under the provisions of 37 CFR 1.12 r SIX (6) MONTHS from the mailing date of this communication. Disperiod for reply is specified above, the maximum statutory period vure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COI 36(a). In no event, howev will apply and will expire S , cause the application to | MMUNICATION. ver, may a reply be time IX (6) MONTHS from the become ABANDONED | ely filed ne mailing date of this commi (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 28 D | ecember 2005 | | | | | | |
| 2a)□ | | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the m | | | | | | | | |
| , | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | ion of Claims | | | | | | | |
| 4\⊠ | Claim(s) <u>1-6</u> is/are pending in the application. | | | | | | | |
| 7/63 | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | | | |
| · | Claim(s) 1-6 is/are rejected. | • | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| 8) 🗌 | Claim(s) are subject to restriction and/o | r election requiren | nent. | | | | | |
| Applicat | ion Papers | | | | | | | |
| | The specification is objected to by the Examine | ·r | | | | | | |
| , — | The drawing(s) filed on <u>28 December 2005</u> is/a | | i or b)☐ objecte | d to by the Examine | r. | | | |
| ,_ | Applicant may not request that any objection to the | | | _ | | | | |
| | Replacement drawing sheet(s) including the correct | = ' ' | | | .121(d). | | | |
| 11) | The oath or declaration is objected to by the Ex | caminer. Note the | attached Office | Action or form PTO- | 152. | | | |
| Priority | under 35 U.S.C. § 119 | | | | | | | |
| - | Acknowledgment is made of a claim for foreign ⊠ All b) Some * c) None of: | priority under 35 | U.S.C. § 119(a)- | (d) or (f). | | | | |
| | 1. Certified copies of the priority documents | s have been recei | ved. | | | | | |
| | 2. Certified copies of the priority documents | s have been recei | ved in Applicatio | n No | | | | |
| | 3. Copies of the certified copies of the prior | rity documents hav | ve been received | d in this National Sta | ge | | | |
| | application from the International Bureau | - | | | | | | |
| * (| See the attached detailed Office action for a list | of the certified cop | pies not received | l. | | | | |
| | · | | | | | | | |
| | | | , | | | | | |
| Attachmen | ut(s) ce of References Cited (PTO-892) | ∧ □ 1. | nterview Summary (F | OTO 413) | | | | |
| | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) | P | Paper No(s)/Mail Date | e | | | | |
| 3) 🛛 Infor | mation Disclosure Statement(s) (PTO/SB/08) | · | Notice of Informal Par Other: | tent Application | | | | |
| Pape | er No(s)/Mail Date | | /u:ci | | | | | |

Art Unit: 1725

DETAILED ACTION

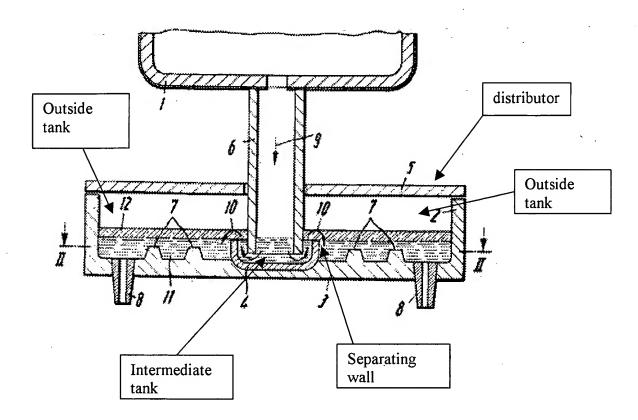
Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus (US 3,887,171), and further in view of Takeuchi et al (US 4,830,090).

Neuhas discloses a drop feed device for feeding an ingot mold with molten metal comprising a distributor having substantially prismatic shape, with one opening, in which the inside of the distributor comprises at least 3 tanks, of which the first two tanks are arranged at the

Art Unit: 1725

end of the distributor and at least one further tank is set in an intermediate position with respect to the tow first tank by respective separating walls.



Neuhas fails to teach holes on the separating walls. However, Takeuchi et al disclose an opening (11) for the purpose of preventing solid from the top and bottom of the intermediate tank to flow to the outside tank (col. 3, lines 15-23 and figures).

Therefore, it would have been obvious to an ordinary skill in the art at the time applicant's invention was made have holes on the separating walls as taught by Takeuchi et al, in

Art Unit: 1725

Neuhas, in order to avoid unwanted product to the outside tank, since the outside tank is for final casting step.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhas (US '171) as applied to claim 1 above, and further in view of Kneppe et al (US 2002/0029865).

Neuhas discloses the claimed invention above, but lacks the mentioning of a further distributor between the first distributor and the mold.

However, Kneppe et al disclose the second distributor (3) for the purpose of casting clean metal.

Therefore, it would have been obvious to an ordinary skill in the art at the time applicant's invention was made to use more than two distributors as taught by Kneppe et al, in Neuhas's apparatus, in order to clean the molten metal prior to casting.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhas (US '171) as applied to claim 1 above, and further in view of Poloni et al (US 5,716,538).

Neuhas discloses the claimed invention above, but lacks the mentioning of discharger walls less than 7 degrees.

However, Poloni et al disclose the discharger should not be more than 15 degrees for the purpose of reducing turbulence during feeding (col. 4, lines 65-67).

Art Unit: 1725

Therefore, it would have been obvious to an ordinary skill in the art to have the discharger less than 15 degrees as taught by Poloni et al, in Neuhas's apparatus, in order to lessen the amount of turbulence during feeding.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (571) 272-1184. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Len Tran

Primary Examiner

Art Unit 1725